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**Identification of Variables
Predictive of Payment in Full of
Third Party Outpatient Claims**

A Graduate Management Project
Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the
Requirements for the Degree
of
Master of Health Administration
by
Lieutenant Leslie A. Moore, MSC, USN, CHE
May 1996

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ABSTRACT

The purpose of this study was to determine, using multiple discriminant analysis, the effects of the predictor variables, CPT (grouped to make visit type) codes, specific third party payers, and the number of claims, on payment in full of third party outpatient billings at Naval Medical Center San Diego, for fiscal year 1994.

Two random samples were extracted from the Third Party Collection database. One sample ($N=147$) consisted of those bills which were paid in full; the other ($N=150$) was made up of those bills which were not paid in full. Discriminant function analysis was used to distinguish among the groups, based on the predictor variables. Stepwise multiple regression was then employed to determine the contribution of the variables to payment in full.

Results of the study indicate that the third party payer is a significant predictor of payment in full. However, nearly 77 percent of the claims not paid in full are due to deductibles which have not been met and require copayments; both are situations over which military treatment facilities have no control.

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The main implication of this study is that particular third party payers are more likely than others to pay a claim in full. The relationships with these payers should be cultivated in an attempt to recoup as much outpatient visit charges as possible. All facility staff coming into contact with patients must maintain a conscientious effort to identify patients with third party payers. Further, the staff must ensure maximum compliance with the Third Party Program initiatives in order to collect whenever the opportunity is present.

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I. INTRODUCTION

Conditions That Prompted the Study

Post-cold war military planning called for a reduction in the size of the uniformed forces in an effort to reduce spending. Resultingly, the military is facing a 25 percent overall reduction in personnel, increasing costs, and tighter budgets, but only a nine percent reduction in beneficiaries (Southby, 1993). In June 1994, approximately 8.6 million people were eligible for medical care - 1.9 million active-duty members and 6.7 million nonactive-duty beneficiaries (Baine, Backhus, Williams, and Weldon, 1994).

In an effort to confront the significant changes and challenges taking place, the Department of Defense's (DoD) military health care system is developing and implementing several initiatives aimed at cutting costs without cutting services. This is a daunting challenge as the DoD is both one of the nation's largest health care providers as well as a payer for care for millions of military beneficiaries (Baine, 1991). One area which allows the DoD health

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care system to recapture dollars for services rendered, is third party insurance recovery.

Title 10 United States Code, Section 1095, amended in 1991 authorizes the DoD hospitals to bill private insurance companies for health care services provided to uniform services dependents and retirees. The program is designed to bring in additional revenues to the hospital without any additional charges being incurred by our beneficiaries. Patients are not required to pay any deductibles or copayments and all additional revenues will come solely from the private health insurance companies.

Under the Medical Care Recovery Act (MCRA), Title 42 United States Code, Sections 2651-2653 and Title 10 United States Code, Section 1095, amended in 1990, the Department of Defense is entitled to recover the reasonable cost of medical treatment provided to its' beneficiaries for injuries or illnesses caused by the negligence of another individual. The MCRA Claims Division of the Naval Legal Service Office is responsible for pursuing these claims on behalf of the medical treatment facilities. All medical costs recovered by the Naval Legal Service Office are

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returned to the military treatment facility (MTF) which provided the care.

In accordance with Title 10, United States Code, Section 1095, amended in 1991, as well as various military instructions/regulations, Military Treatment Facilities are not only authorized, but mandated to bill commercial, private insurance companies for health care these facilities provide to uniformed services beneficiaries (Department of Defense, 1993; Department of the Navy, 1993; Department of the Navy, 1994). Further, it is the policy of the Department of Defense to collect from third party payers to the fullest extent allowed by law (Department of Defense, 1993).

The Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA) authorized collection for reasonable health care costs incurred by many military health care beneficiaries. In 1986 the program was called "Coordination of Benefits," and allowed only for collection against inpatient care. At that time, the law required that funds billed by the MTF for insurance coverage be deposited to the U.S. Treasury. Six years later, outpatient care became reimbursable.

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Collection for outpatient visits became effective on 1 October 1992 and presently, the law allows collected funds to be returned to the Operating and Maintenance, Navy (O&M,N) accounts of the MTF providing the treatment, instead of the U.S. Treasury, as was the previous practice.

Naval Medical Center San Diego (NMCSD) opened its business office in 1992 (fiscal year 1993) and began billing for outpatient services that same year. Outpatient collections for the first year were \$215,101.44 (Washington, 1995). By fiscal year 1994, the Third Party Collections Program, as the revamped program is called, was well underway. Despite the efforts of the staffs of both the clinics and the business office, payment in full of a bill for an outpatient clinic visit was poor; only 12.6% of outpatient bills collected payment in full. In contrast, 34.6% of the same day surgery bills were paid in full. Thus, the impetus for this study.

Statement of the Problem

No one at Naval Medical Center San Diego has studied the factors contributing to payment in full of

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submitted claims, rather, the effort has been to increase the number of claims submitted on the whole.

With the hospital's operating budget being decremented to offset the expected income from third party collections, the hospital cannot afford to settle for less than payment in full whenever possible. If there are changes which can be implemented to increase the success rate of payment in full, the staff of the Third Party Collection Program must attempt to identify and target them. If there are indeed predictor variables, they can be more closely scrutinized in an attempt to increase the collection rate and thus provide more money to contribute to mission achievement.

Literature Review

Currently, the United States spends nearly 14 percent of the nation's Gross Domestic Product on health care - a fair amount above that of some other countries. Comparatively, in 1991, when Americans spent 13.4 percent, Canadians, Germans, and the Japanese spent 10 percent, 8.5 percent, and 6.6 percent respectively (Davis, 1995). Meanwhile, the national

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spending for health care in this country grew an average of 12.4 percent per year from 1970 to 1991 (Knickman and Thorpe, 1995). Further, our expenditure is projected to increase to 18 percent by the close of the century (Davis, 1995).

Just what is known about the American population in terms of health insurance? We know that approximately 14 percent of all Americans are uninsured. We also know that about half of the uninsured remain so for at least two years and that only 7 percent of the uninsured are uninsured by choice. Since employers tend to be our link with health plans, one might be surprised to learn that 84 percent of all of the uninsured are employed full- or part-time for at least part of the year (Davis, 1995). Part of this figure can be explained by the estimate that about 51 percent of the uninsured work for a firm which does not provide insurance (Morrisey, Jensen, and Morlock, 1994).

Estimates on the government's share of health expenditures vary. Some estimate that more than half of health care expenditures are historically borne by the government (Data Line, 1990), whereas others put

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it slightly lower at 43 percent (Knickman and Thorpe, 1995). Most agree, however, that the majority of private health care remunerations come from either private insurers or the individuals receiving treatment (Data Line, 1990) (Knickman and Thorpe, 1995). Just what kinds and types of health insurance exist, how does one obtain coverage, and how does health insurance operate?

The first "sickness" insurance appeared in 1847, but the insurance industry paid very little attention to health insurance until after World War II (Rakich, Longest, and Darr, 1992). The original policies were basically add-ons on accident insurance policies and were intended mainly to facilitate the replacement of lost income (Health Insurance Institute, 1975).

When Blue Cross began operations in the 1930s, it provided what was called a "service" benefit for hospital care. Under such a plan, the company totally reimbursed the hospital for a patient's stay (up to a maximum period). The patient did not share in any of the cost. This approach pleased the hospitals because they were fully reimbursed and patients had no incentive to shop for a less expensive hospital.

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However, such a plan also encouraged hospital inpatient care, rather than another less expensive but equally appropriate care setting, because it only paid for hospital provided care (Feldstein, 1993); today, outpatient care is the preferred method of health care delivery.

Much of inpatient care has given way to ambulatory care (Lobas, Lepinski, and Abramowitz, 1992). Quite often an ambulatory care encounter is the first contact a patient has with the health care system and it is often the point of contact for continuing care.

Ambulatory Care

Ambulatory care consists of a large range of services which can be provided to patients who do not have to be hospitalized. The care can range from treating a common cold to providing surgical services. In fact, by 1990 ambulatory surgery accounted for just over half of the procedures performed in hospitals. In that year, there were 11.1 million in-hospital procedures performed and another 2.3 million performed in ambulatory surgery centers (Mangano, 1993).

Stand-alone ambulatory surgery centers have proven themselves to be cost-effective, with facility fees

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running about half of those in a hospital setting (Vaughan, Aluise, and McLaughlin, 1991). Part of this reduced cost results from the care setting. Ambulatory care can be provided in a variety of settings from patients' homes to traditional hospital settings - with many alternatives in between.

Outpatient care has become so prevalent that ambulatory care is currently the only growth area among hospital-based services. Hospital outpatient visits now outnumber the acute care inpatient days in this country. The American Hospital Association reports that ambulatory care providers, in a free-standing setting, doubled between 1980 and 1990. And, total hospital outpatient revenue went from 12 percent in 1983 to 33 percent in 1992 - this number is expected to grow to 50 percent by the year 2000 (McGuire, 1994). Most people pay for this care through some form of insurance.

Kinds of Insurance

Other than self-insurance, where one pays for all health care entirely from one's own funds, there are three ways to obtain health insurance: belong to a group plan, pay premiums for an individual plan, or

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enroll in a prepaid health plan. A group plan is one where a group of employees or some other homogeneous group, like members of a professional organization, is insured under a single policy issued to the employer, with individual certificates given to each insured individual or family.

Generally, a group policy provides better benefits and lower premiums than does an individual policy. If the policy has that which is called a conversion privilege, the member may convert to an individual policy if the member leaves the employer or organization. Normally, with a conversion, the premium is increased and the benefits lowered. However, if the individual has developed a condition which would preclude the member from getting other coverage, or would be considered a high risk to insurers, conversion is still a good idea because no physical is required, therefore a pre-existing condition cannot be excluded.

An individual plan is one which is issued to the individual and any dependents. This kind of insurance tends to be quite expensive and has somewhat lower benefits than in a group policy. Sometimes this kind of policy is also referred to as personal insurance.

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A prepaid health plan is a program in which a group of enrolled beneficiaries pay fixed periodic payments. The health care services are then provided by a group of participating physicians. A health maintenance organization, which delivers care on a capitated basis, rather than fee-for-service, is an example of this kind of program.

Types of Insurance

There are many types of insurance coverage which fall under the three kinds described above. A wide range of insurance policies can be purchased; from life insurance to aviation trip insurance and most anything in between.

Commercial insurance is provided mostly to groups of employees as part of fringe-benefits packages. One example of commercial insurance is what is commonly referred to as 'The Blues'; Blue Cross and Blue Shield. Blue Cross mainly offers hospitalization coverage. Blue Shield, on the other hand, mostly offers insurance for physician's services in an inpatient setting with a limited amount of office-based care coverage (Knickman and Thorpe, 1995).

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Comprehensive major medical insurance is one which offers the protection of both a basic and major medical health insurance policy. Major medical expense insurance is one in which the expense of major illnesses or injuries are financed. Major medical expense insurance, like many other types of insurance, usually includes a deductible.

Deductibles and Coinsurance

A deductible is an amount which the insured must pay before the insurer will assume any liability for any remaining costs of covered services. For example, a \$100 deductible requires that a beneficiary pay \$100 toward his individual care before benefits will be paid for his claims. Deductibles typically range between \$100 and \$300 (Kongstvedt, 1995). A deductible differs from coinsurance or cost sharing.

Coinurance is basically a cost-sharing requirement under a health insurance policy that provides that the insured will assume a percentage of the costs of covered services. Typically the insurance company will assume 80% of the bill with the remainder to be paid by the beneficiary (Kongstvedt, 1995). More than half of all group/staff health maintenance

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organizations require copayments for their providers' services (Marmor, 1994). Both deductibles and coinsurance are factors that play a big part in reimbursements; so does coding.

Coding

Coding is the process of transferring the narrative description of diseases, injuries, and procedures into numeric designations. The American Medical Association publishes a book each year containing the five digit codes. It is a systematic listing and coding of procedures and services performed by physicians ("CPT '95," 1994). This process has been taking place since 1966 (Zuber and Henley, 1992), but in the past ten years, it has become significant in determining hospital payment.

Before the prospective payment system was implemented, International Classification of Diseases, 9th Edition, Clinical Modification (ICD-9-CM) codes that had been previously recorded, were used to determine the DRG reimbursement system. This was a foreshadowing of the use of today's ICD-9-CM and Current Procedural Terminology (CPT) data to determine ambulatory surgery and physician's services in the

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future. In the outpatient setting, a prospective payment system is in development.

It is expected that a combination of Ambulatory Patient Groups and the Product of Ambulatory Care will be used to define the amount and type of resources used. In general, where coding is concerned, to get the highest reimbursement, coding must be accurate as the most specific code results in the highest payment (Kost, Muller, and Smith, 1993).

Hospitals, like any other viable business entity, must be able to capture the use of its services so that a charge can occur. With health insurance, once the use itself is captured, certain processes must take place before a billing can take place. In particular, a third-party payer's requirements for documentation and procedure coding, as previously detailed, must be satisfactorily accomplished in order to avoid payment delays or even worse, denials (Thompson and Barrett, 1993).

Currently, the typical private provider can expect to receive only 80 percent of the billed fee for an office visit. Not surprisingly, the fees are characteristically highest in the West and lowest in

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the Midwest. In the West, the typical fee for a new patient's office visit is \$120 and \$95 for the Midwest patient (Crane, 1995).

Purpose, Objectives, and Working Hypotheses

The purpose of this study is to determine the relationship between specific groups of CPT (visit type) codes specific third party payers, the number of claims and payment in full of the third party outpatient billings at Naval Medical Center San Diego for fiscal year 1994.

The objective of this study was to determine whether or not there are particular variables which are more predictive than others of payment in full. An initial milestone en route to this objective, was a full literature review with regard to outpatient care in the areas of insurance, various types of coverage, and the billing and reimbursement of claims.

Upon meeting the forgoing objective and associated milestones, another objective was to develop, explore, and present any possible recommendations to enable the facility to maximize the potential for full reimbursement of third party outpatient care claims.

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HO₁: There is no systematic relationship between payment in full and visit type code.

HA₁: A systematic relationship between payment in full and visit type code does exist.

HO₂: There is no systematic relationship between payment in full and the number of claims submitted.

HA₂: A systematic relationship between payment in full and the number of claims submitted does exist.

HO₃: There is no systematic relationship between payment in full and the third party payer.

HA₃: A systematic relationship between payment in full and the third party payer does exist.

II. Method and procedures

Population

The first step in the study was to gather the people, objects, and events to be studied. In order to determine the relationship between the visit type codes, third party payers, number of claims and payment in full status, a retrospective analysis of a twelve-

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month period (fiscal year 1994), of outpatient collections was conducted. The Business Office, which is part of the Fiscal Department, maintains an appropriate database, Third Party Outpatient Collections (TPOC), and a twelve-month period constituting fiscal year 1994 is available.

The database was scrutinized to ensure records with identifiable errors or disqualifying data were not used. Excluded were those records not within the specified time frame. Additionally, those records which did not contain all the required data were excluded as were those which contained conflicting data. One example of conflicting data was where within a single claim, one transaction code reflected a write-off due to a remaining deductible for the patient, and a subsequent write-off transaction code reflected a code which indicated the patient was not covered by the policy; an impossible combination.

Once the screening of the database was completed, the remaining records of the bills generated for outpatient treatment in fiscal year 1994 were reviewed and provided the people, objects, and events for this study.

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The database field "Transaction Control Number" was used to identify particular events. Use of this field allowed for complete patient confidentiality as no identifying patient information was used in its formation.

Operationalization of Variables

The dependent variable (Y) was payment in full; the payment received from the third party payer had to be for the full amount billed. Payment in full was a dichotomous variable. There were three independent variables (X).

The visit type code consisted of groups of CPT codes as arranged on various Superbills in use throughout the various services within the facility. A sample Superbill is included as Figure 1.

Additionally, various CPT codes were derived from the American Medical Association's CPT Code Book and grouped according to specialty. This variable was coded as categorical.

The third party payer associated with each claim and to whom the claim was sent. Third party payer was a categorical variable.

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The number of claims submitted to a particular third party payer, on behalf of a specific beneficiary; this was a continuous variable.

The three control variables consisted of: the patient category; retiree, active duty member's family member, or retiree's family member; the age of the patient; and, the gender of the patient.

The variable gender was coded as a dichotomous variable. The variable age was a continuous variable, and patient category was categorical.

The hypothesized functional relationship was:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6)$$

where

Y = Payment in Full

X_1 = Number of Claims Submitted

X_2 = Visit Type Code

X_3 = Gender

X_4 = Patient Category

X_5 = Third Party Payer

X_6 = Age

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Statistical Methodology

Discriminant function analysis (logistical regression) was used to distinguish among the groups, based on the predictor variables. The purpose of using this technique is to allow one to determine which predictors will most clearly distinguish among the given groups. The technique points out the factors most related to the various groups and how well group membership can be predicted (Munro and Page, 1993).

From the population ($N=3,942$), two groups were formed; paid in full ($N=997$) and not paid in full ($N=2,945$). A random sample of 150 transactions (every 20th record) was selected from the not paid in full group and a sample of 142 (every seventh record) was selected from the paid in full group.

Each of the non-continuous variables were recoded (dummy coding 0,1) so as to not give unequal amounts of weight based on the respective categorical designation. For example, seven groups of third party payers were used, one through six being specific payers, with the seventh being a group of all others. The group designated as "6" had no greater weight than group "1" once recoding was accomplished.

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Stepwise multiple regression was then utilized to test the effects of individual independent variables while controlling for the effects of the others upon the dependent variable.

The full regression model equation used follows:

$$Y = a_0U + b_1\text{Number of Claims} + b_2\text{Radiology Procedure} + b_3\text{Outpatient Consultation} + b_4\text{Inpatient Consultation} + b_5\text{Office Visit for Established Patient} + b_6\text{Office Visit for New Patient} + b_7\text{Dept of Medicine} + b_8\text{Emergency Dept Services} + b_9\text{Case Management} + b_{10}\text{Surgery Department} + b_{11}\text{Gender} + b_{12}\text{Retiree} + b_{13}\text{Family Member of Retiree} + b_{14}\text{Family Member of Active Duty} + b_{15}\text{APWU} + b_{16}\text{BC FEP} + b_{17}\text{BS PERS CARE} + b_{18}\text{CIGNA 1620} + b_{19}\text{GEHA} + b_{20}\text{MAIL} + b_{21}\text{ALL OTHERS} + b_{22}\text{Age}$$

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Reliability and Validity

The reliability of this study is very much dependent upon the data provided by the business office. It is assumed that the data was coded and recorded correctly by the coders and the billers and entered correctly by data entry personnel.

The validity of the dependent variable, payment in full, was measured by the correlation coefficient.

III. Results

Descriptive Statistics

The descriptive statistics for this study are at Table 1. The critical value (2 tail, .05) was +/- .113. Two variables had correlations that exceeded the critical value and were positive: BC FEP (.431), and age (.422). Five variables had correlations that exceeded the critical value and were negative: BS Pers Care (-.115), Cigna 1620 (-.128), Mail (-.281), the group of all Other (-.244) third party payers, and Active Duty Family Member (-.135). The remainder of the variables did not meet the critical value and were eliminated from further consideration and analysis.

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Inferential Statistics

The inferential statistics for this study may be found at Table 2. The eight remaining variables used in the final multiple regression subset model accounted for 37.8 percent of the variance of payment in full of third party outpatient billings. The subset model was as follows:

<u>Model</u>	<u>Equation</u>
Step #8	$Y = a_0U + b_{22}Age + b_5Office\ Visit$ for an Established Patient + $b_{10}Surgery\ Department + b_{16}BC$ $FEP + b_{19}GEHA + b_{20}MAIL + b_{21}ALL$ OTHERS + $b_{14}Family\ Member\ of$ Active Duty

Acceptance/Rejection of Hypotheses

HA₁: A systematic relationship between payment in full and Visit Type code does exist. This hypothesis is rejected; in our sample a statistically significant relationship between a Visit Type Code and payment in full was not found.

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HA₂: A systematic relationship between payment in full and the number of claims submitted does exist. This hypothesis is rejected; in our sample a statistically significant relationship between the number of claims and payment in full was not found.

HA₃: A systematic relationship between payment in full and the third party payer does exist. This hypothesis is accepted.

IV. Discussion

The purpose of this study was to determine, using multiple discriminant analysis (logistical regression), the effects of the predictor variables, CPT (visit type) codes, specific third party payers, and the number of claims, on payment in full of third party outpatient billings at Naval Medical Center San Diego, for the fiscal year 1994.

The expected result was that at least one of the variables would be a significant predictor of payment in full of third party payer outpatient claims. If such a relationship could be established, the identified predictor(s) could be scrutinized and targeted to maximize the likelihood that payment in

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full for third party payer outpatient claims will be received. This study was conducted at a large (>350 bed) military treatment facility and may have implications for other similar military medical treatment facilities.

Analysis of Hypotheses

HA₁: A systematic relationship between payment in full and visit type code does exist. This hypothesis is rejected. A limited number of CPT codes were entered onto the bills; the vast majority of bills contained only one code. Compounding this limited variability of codes is the fact that the most frequently utilized third party payer, BC FEP, has requested the billing office enter only "00000" in place of a CPT code. According to the billing office, the payer is not interested in the CPT code since the billing is a flat amount, no matter the code.

HA₂: A systematic relationship between payment in full and the number of claims does exist. This hypothesis is rejected. The mean age for patients paying in full is more than 73 years (73.415); for non payment in full, almost 60 years (69.640). It was

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expected that this variable would be statistically significant. It was anticipated that older patients would have more visits. Thus, the patient would have likely fulfilled any deductible and then incurred fully reimbursable visits. However, this was not the case and with the mean number of claims between five and six (5.732) for both paid and not paid in full, the number of visits was lower than theorized.

HA₃: A systematic relationship between payment in full and third party payer code does exist. This hypothesis is accepted, $F(19, 272) = 9.01, p < .001$. This variable accounts for 16 percent of the variability of payment in full. This indicates a certain percentage of claims will always remain not paid in full. Not only does the particular carrier impact on this variable, but also the type of coverage; some policies are limited to 80 percent payment.

Age as a Significant Correlation

Age. This variable has a statistically significant correlation, $F(1, 290) = 62.84, p < .001$. Age accounts for almost 18 percent (.178) of the variability of payment in full. This indicates the

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elderly are making more visits than the younger patients, but as discussed previously, the mean number of visits is about equal for both payment and non-payment in full. Further, although the elderly may be making more visits, the number of claims submitted is still statistically insignificant within the model.

Non-payment in Full

Reported Reasons for Non-payment in Full.

The reasons for non-payment in full, for the sample, are recorded at Table 3. The lack of a fully paid deductible accounts for just over 31 percent (31.33) of those transactions which were not paid in full. Even more limiting is the fact that forty-five percent (45.33) of the not paid in full records will never be paid in full; the policy requires a co-payment. These two factors together account for almost 77 percent (76.66) of the not paid in full transactions.

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V. Recommendations and Conclusions

Recommendations

Recommendation 1: Continue a stepwise refinement of the entire Third Party Collection Program. Ensure that with staff turnover, new personnel are indoctrinated into the beneficiary - third party payer identification process. Ensure that identification and collection has a positive incentive attached for the departments involved; otherwise, the process becomes a disincentive. The importance of the program must continually be emphasized to all personnel. The Staff's compliance with established procedures and ideas for enhancements to the program should be solicited.

Recommendation 2: Initiate a follow-up routine other than just a second billing. Perhaps a phone call follow-up to the high volume third party payers could be tested to see if better performance follows. A time and motion study should be conducted if this effect is considered.

Recommendation 3: Discuss bill preparation with the high volume third party payers. If there is a

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particular form a payer prefers, determine if it is possible for the facility to bill on that form. If there is a certain procedure that would make it easier, and therefore, probably faster, for a payer to review and pay a claim, do it if at all possible. Perhaps such a phone call could eliminate the need for a second billing or a correctional billing. The goal is to receive the maximum payment upon presentation of the first bill.

Conclusions

The main implication of this study is that certain third party payers are more likely to pay a claim in full than others. The relationships with these payers should be cultivated in an attempt to recoup as much outpatient visit charges as possible.

Future visits/billings may or may not cause the 31 percent deductible-not-met category into payments in full, one cannot tell without knowing the type of policy in each case. In any event, 45 percent will never enter the fully paid category, because the policy requires a copayment. With nearly 77 percent of the not paid in full transactions currently uncollectible

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because the patient may not incur an out-of-pocket expense, there is a very limited chance that the current collection rate can be greatly improved.

Although the Third Party Collection Program is operating under regulatory constraints beyond the control of the facility's governing body, every effort must be made to pursue payment in full whenever the opportunity does present itself; every successful recoupment means more money for our beneficiaries' health care needs.

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LIST OF TABLES

Table 1

Descriptive Statistics

<u>Variable Name</u>	<u>Payment in full</u>		<u>Not Paid in full</u>		<u>Correlation</u>
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Age	73.415	11.804	59.640	17.231	.422*
Number of Claims	5.732	6.740	5.793	8.840	-.004
<u>n = 142</u> %					<u>n = 150</u> %

Type of Visit

Radiology	12	8.45	14	9.33	-.015
Outpt Consult	14	9.86	13	8.67	.021
Inpt Consult	0	0	1	.67	-.057
Established Pt	84	59.15	79	52.67	.065
New Patient	14	9.86	17	11.33	-.024
Dept of Medicine	4	2.82	5	3.33	-.015
Emergency Dept	14	9.86	17	11.33	-.024
Case Mgt	0	0	2	1.33	-.081
Surgery Dept	0	0	2	1.33	-.081

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Table 1 (continued)

Descriptive Statistics

<u>Variable Name</u>	Payment in full		Not Paid in full		<u>Correlation</u>
	<u>n = 142</u>	<u>%</u>	<u>n = 150</u>	<u>%</u>	
<u>Gender</u>					
Male	78	54.93	74	49.33	.056
Female	64	45.07	76	50.67	-.056
<u>Third Party Payer</u>					
APWU	0	0	2	1.33	-.081
BC FEP	95	66.90	36	24.00	.431*
BS PERS CARE	0	0	4	2.67	-.115*
CIGNA 1620	0	0	5	3.33	-.128*
GEHA	16	11.27	8	5.33	.108
MAIL	5	3.52	34	22.67	-.281*
OTHER	26	18.31	61	40.67	-.244*
<u>Patient Category</u>					
Retiree	78	54.93	72	48.00	.069
Retiree Family Mbr	55	38.73	56	37.33	.014
Active Duty Family Mbr	9	6.34	22	14.67	-.135*

*Critical Value (2 tail, .05) = +/- .113

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Table 2

Inferential Statistics

<u>Effect</u>	<u>R²</u>	<u>R²</u>	<u>df1</u>	<u>df2</u>	<u>F</u>	<u>p</u>
Age	.178	.178	1	290	62.836	.001
Gender	.179	.001	2	289	31.558	.001
Pt Category	.201	.022	4	287	18.075	.001
Visit Code	.221	.020	12	279	6.593	.001
Number of Claims	.223	.002	13	278	6.147	.001
Third Party Payers	.386	.163	19	272	9.010	.001

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Table 3

Reasons Reported by Third Party Payer for Nonpayment in Full

Reported Reasons	Carrier						ALL MAIL OTHERS
	APWU	BC FEP	BS CARE	CIGNA 1620	GEHA	MAIL	
Deductible Not Met	0	13	4	1	0	8	21
Copayment Required	0	21	0	4	7	13	23
Excess Policy Charge	0	0	0	0	0	2	3
Medicare Supplemental	0	0	0	0	0	0	4
Services Not Covered	0	0	0	0	0	2	0
Not a Billable Policy	0	0	0	0	0	0	2

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Table 3 (continued)

Reasons Reported by Third Party Payer for Nonpayment in Full

(N=150)

Carrier

Combination Reasons	APWU	BC FEP	BS CARE	PERS	CIGNA 1620	GEHA	MAIL	ALL OTHERS
Deductible/ Excess Charge	1	0	0		0	0	2	1
Copayment Req/ Excess Charge	1	0	0		0	1	5	3
Copayment Req/ Deductible	0	2	0		0	2	2	2

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Figure 1

Sample Superbill

**NAVAL MEDICAL CENTER, SAN DIEGO
DEPARTMENT OF CARDIO-THORACIC SURGERY**

JON: 5DCMA

SUPERBILL							
		DESCRIPTION	CPT	DESCRIPTION	CPT	DESCRIPTION	CPT
1. OFFICE VISIT		4. INPATIENT CONSULTATIONS		8. ENDOSCOPY			
N-O S-H-O-W		INITIAL New/Est Pt, Minor		99251		Bronchoscopy; Diagnostic, (Flexible or Rigid), w/o Cell Washing or Brushing	
C-A-N-C-E-L-L-A-T-I-O-N		Expanded 99252		<input type="checkbox"/> Mod Complexity	99254	with Biopsy	
Established, Moderate to High		Detailed 99253		<input type="checkbox"/> High Complexity	99255	Esophagus with Biopsy	
Moderate	99214	<input type="checkbox"/> Low to Moderate	99213	FOLLOW-UP, Low Complexity		43202	
Minor	99212	<input type="checkbox"/> Minimal	99211	Moderate 99262		<input type="checkbox"/> High	43200
New Patient, High Complexity		99205		9. CONFIRMATORY CONSULTATIONS		Esophagus, Diagnostic	
Mod to High		99204	<input type="checkbox"/> Low	99202		Thoracoscopy	
Moderate	99203	<input type="checkbox"/> Minimal	99201	New/Est Pt, Minor		32700	
Post Operative Visit		99024		Expanded 99272		<input type="checkbox"/> Detailed	32705
2. CONSULTATIONS: OUTPATIENT		99241		Mod Comp 99274		<input type="checkbox"/> High Complexity	Debridement; Skin; Partial Thickness
New/Est Patient, Brief		99242		99244		Incision & Drainage-Hematoma	
Expanded		99243		99245		Incision & Drainage-Complete	
Detailed		99246		99247		Incision & Drainage (Complex)	
3. EMERGENCY DEPARTMENT SERVICES		99285		99286		Post Op Wound Infection, Incision & Drainage	
New/Est Pt, Life Threatening		99287		99288		Skin, Full Thickness; Debridement	
High Severity		99289		99290		Skin & Subcutaneous Tissue	
Moderate Severity		99291		99292		Thoracentesis, for Aspiration, Incision/Subsequent	
Low to Moderate Severity		99293		99294		Tube Thoracostomy w/o Water Seal	
Minor		99295		99296		Other/Specific:	
DIAGNOSIS		ICD-9		DIAGNOSIS		ICD-9	
Abscess of Lung		513.0		Benign Neoplasm, Trachea		Esophagus (GER)	
Abscess of Mediastinum		513.1		Benign Neoplasm, Bronchus and Lung		530.1	
Abdominal Aortic Aneurysm, Not Ruptured		441.9		Pleura		Esophagus, Carcinoma in Situ	
Abdominal Aortic Aneurysm, Ruptured		441.5		Mediastinum		530.9	
Achalsia and Cardiospasm		530.0		Thymus		Esophagus, UNSP Disorders	
Coronary Occlusion w/o Myocardial Infarction		411.81		Heart		530.8	
Acute Myocardial Infarction, UNSP		410.90		Bronchiectasis		Esophagus, Other Specified Disorders	
Acute Pernicarditis, Other		420.99		Carcinoma in Situ, Trachea		530.5	
Acute/Subacute Bacterial Endocarditis		421.0		Bronchus and Lung		Esophagus, Dyskinesia	
Acute/Subacute Endocarditis, UNSP		421.9		Cardiovascular Disease, UNSP		530.6	
Aneurysm of Heart		414.1		Coarctation of Aorta (Preductal/Postductal)		Esophagus, Diverticulum, Acquired	
Aneurysm of Pulmonary Artery		417.1		Coronary Atherosclerosis		530.0	
Anomalies of Great Veins		747.4		Chest Wall Mass		Esophagus, Cervical, Malignant Neoplasm	
Arterial Embolism/Thrombosis		444		Chronic Airway Obstruction, NEC		150.1	
Arteriovenous Fistula / Pulmonary Vessels		417.0		Emphysema, w/o Fistula		Thoracic Esophagus	
Atherosclerosis of Aorta		440.0		Endobronchial Lesion		150.2	
Aorta, Dissecting Aneurysm		441.0		Endocarditis		Abdominal Esophagus	
Thoracic Aneurysm Ruptured		441.1		Endocarditis, Infective		150.3	
Thoracic Aneurysm w/o Rupture		441.2		Endocarditis, Noninfective		Upper Third	
Aortic Valve Disorders		424.1		Endocarditis, Nonbacterial		Middle Third	
Aortic/Mitral Valves Multiple Involvement		396.8		Endocarditis, Noninfective		Lower Third	
Aortic/Mitral Valve Disease, UNSP		396.9		Endocarditis, Noninfective		150.4	
Aortic/Mitral Valve Stenosis		396.0		Endocarditis, Noninfective		150.5	
Aortic Valve Disease, Other/UNSP		395.9		Endocarditis, Noninfective		150.9	
Asbestosis		501		Endocarditis in Diseases Classified Elsewhere		150.9	
Atresia & Stenosis of Aorta		747.22		Endocarditis in Diseases Classified Elsewhere		150.2	
ADDRESSOGRAPH				Completed Insurance Questionnaire <input type="checkbox"/> Yes <input type="checkbox"/> No			
				DATE/TIME:			
				Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No			
				Active Duty <input type="checkbox"/> Yes <input type="checkbox"/> No			
				SIGNED: PHYSICIAN/PROVIDER			

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APPENDIX - Definitions

Third Party Payers

ALL OTHERS - Includes any carrier not specifically named; the highest volume carriers were named individually and the others combined into a category.

APWU - American Postal Workers' Union

BC FEP - Blue Cross Federal Employee Program

BS PERS CARE - Blue Shield Pers Care

CIGNA 1620 - Cigna Health Care, "1620" is the designation the local collection office uses to differentiate to which address a particular Cigna claim is mailed

GEHA - Government Employees' Health Care Association

MAIL - Mail Handlers' Benefit Plan

Visit Type Codes

Case Management - current procedural terminology codes 99361, 99362, 99371, 99372, and 99373

Dept of Medicine - Any current procedural terminology code from 90701 to 99199 (exclusive of anesthesiology)

Emergency Dept Services - current procedural terminology codes from 99281 to 99285

Inpatient Consultation - current procedural terminology codes from 99251 to 99255 and 99261 to 99263

Office Visit for Established Patient - current procedural terminology codes from 99211 to 99215

Office Visit for New Patient - current procedural terminology codes from 99201 to 99205 and 99024

Outpatient Consultation - current procedural terminology codes from 99241 to 99245

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Radiology Procedure - Any current procedural terminology code from 70010 to 79999.

Surgery Department - Any current procedural terminology code from 10040 to 69979